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C L A I M S

1. A method for interconnecting electrical conduits in an underground borehole by means of an electrical connector comprising a static and a moveable connector part, which parts comprise pairs of intermeshing

5 electrical contacts that are circumferentially spaced around the periphery of a central throughbore within the static connector part, which method comprises:

- installing the static connector part substantially coaxially within the borehole or a borehole tubular such
10 that the central throughbore provides a passage for fluid and debris and for access to the section of the borehole beneath the static connector part after retrieval of the moveable connector part; and

- lowering the movable connector part into the borehole
15 on top of the static connector part such that the pairs of electrical contacts intermesh and that fluid and debris are discharged via the central throughbore into the section of the borehole beneath the static connector part.

20 2. The method of claim 1, wherein the static connector part is mounted within a production tubing in a substantially vertical or inclined borehole and comprises:

- a throughbore which is configured to permit passage of
25 debris and borehole fluid into the interior of the borehole below the static connector part; and
- a set of at least two electrical contacts that is mounted at regular angular intervals relative to a central axis of the central throughbore.

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3. The method of claim 1 or 2, wherein at least one connector part comprises at least one electrical contact, that is arranged in a sealed chamber comprising a dielectric fluid and an entrance opening which is configured to receive a mating electrical contact and which comprises a seal which is configured to inhibit contact between the dielectric and borehole fluids and to surround the electrical contacts when mated and to remain in sealing contact with the mating electrical contact after the electrical connection has been established by the connector.

4. The method of claim 3, wherein the static connector part is retrievably secured within a production tubing of an oil and/or gas production well and comprises a plurality of electrical contacts, that are arranged at regular angular intervals relative to a central axis of the throughbore and/or production tubing and such that the electrical contacts of the static connector part define longitudinal axes along which the mating contacts of the moveable connector part slide into the sealed chambers and which are substantially parallel to the central axis.

5. The method of claim 4, wherein the moveable connector part is connected to an electrical submersible pump (ESP) system or other electrical apparatus.

6. The method of claim 5, wherein the moveable electrical connector part is provided with a plurality of retractable electrical contacts, which are retracted within one or more sealed sections of the upper electrical connector part during the descent of the pump system into the production tubing and which are configured to slide out of said sealed sections of the movable electrical connector part and to contact the

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corresponding electrical contact within a sealed chambers within the static electrical connector part.

7. A wireline retrievable electrical submersible pump (ESP) system or other electrical apparatus which is
5 connected to the moveable part of a downhole electrical connector according to claim 5 or 6.